
AMENDMENTS TO THE CLAIMS

1. (presently amended) A recombinant fusion enzyme Vitreoscilla hemoglobin-D-amino acid oxidase~~VHb-DAAO~~, expressible from a recombinant fusion gene consisting of a gene encoding a bacterial hemoglobin and a gene encoding a D-amino acid oxidase.
2. (unchanged) A recombinant fusion enzyme bacterial hemoglobin-D-amino acid oxidase as set forth in claim 1, wherein said bacterial hemoglobin contains a full or a partial length of a *Vitreoscilla* hemoglobin peptide sequence or its functionality analogous peptide sequence.

Claims 3-5 have been cancelled without prejudice to the subject matter therein.

6. (new) The recombinant fusion enzyme as recited in claim 1, wherein the biological functions of both proteins are maintained.
7. (new) The recombinant fusion enzyme as recited in claim 1, wherein an oligonucleotide is not used for linking.
8. (new) The recombinant fusion enzyme as recited in claim 1, wherein a peptide is not used for linking.
9. (new) An artificial fusion enzyme of VHb and D-amino acid oxidase, expressed as a single polypeptide, consisting of a PCR linked gene of VHb and gene of D-amino acid oxidase.